INTERNATIONAL SEARCH REPORT

International application No. PCT/FI 2004/000391

A. CLASSIFICATION OF SUBJECT MATTER IPC7: G01S 5/02, G05D 1/02 According to International Patent Classification (IPC) or to both national classification and IPC **B. FIELDS SEARCHED** Minimum documentation searched (classification system followed by classification symbols) IPC7: E21F, G01S, G05D Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched SE,DK,FI,NO classes as above Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) EPO-INTERNAL, WPI, PAJ C. DOCUMENTS CONSIDERED TO BE RELEVANT Category* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. EP 1243939 A1 (MATSUSHITA ELECTRIC INDUSTRIAL CO., 1-11 A LTD.), 25 Sept 2002 (25.09.2002), abstract WO 0169041 A1 (SANDVIK TAMROCK OY), 20 Sept 2001 1-11 A (20.09.2001), figure 4, abstract WO 0107976 A1 (CMTE DEVELOPMENT LTD.), 1-11 A 1 February 2001 (01.02.2001), abstract WO 03012470 A2 (SIEMENS AKTIENGESELLSCHAFT), 1-11 A 13 February 2003 (13.02.2003), abstract X Further documents are listed in the continuation of Box C. See patent family annex. Special categories of cited documents: later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent but published on or after the international "X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive filing date document which may throw doubts on priority claim(s) or which is step when the document is taken alone cited to establish the publication date of another citation or other "Y" document of particular relevance: the claimed invention cannot be special reason (as specified) considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "O" document referring to an oral disclosure, use, exhibition or other document published prior to the international filing date but later than "&" document member of the same patent family the priority date claimed Date of the actual completion of the international search Date of mailing of the international search report 26 October 2004 2 9 -10- 2004 Name and mailing address of the ISA/ Authorized officer Swedish Patent Office Box 5055, S-102 42 STOCKHOLM Göran Magnusson /itw Facsimile No. +46 8 666 02 86 Telephone No. + 46 8 782 25 00

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